

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5 CHICAGO REGIONAL LABORATORY
536 SOUTH CLARK STREET
CHICAGO, ILLINOIS 60605



LABORATORY
ACCREDITATION
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ACCREDITED ISO/IEC 17025
Certificate # L2280 Testing

Date: 7/6/2011
Subject: Review of Region 5 Data for United Oil Recovery Services
From: Erlinda Evangelista
Region 5 Chicago Regional Laboratory *E. Evangelista*
To: Office of Enforcement and Compliance Assurance
77 W. Jackson
Chicago, IL 60604

The data being transmitted under this cover memo successfully passed CRL's internal data review procedures as documented in our current Quality Management Plan (QMP) and appropriate Standard Operating Procedures (SOPs). Please be aware that CRL does not perform data validation which is based on your data quality objectives. This function must be performed independently of the laboratory generating the data.

Results in this report represent only the samples analyzed.

Please have the U.S. EPA Project Manager/Officer call the CRL Sample Coordinator at (312) 353-7444 for any comments or questions.

Attached are Results for: United Oil Recovery Services

Sylvia Griffin
Data Management Coordinator and Date Received

07-07-2011
/ /

07-07-2011

Date Transmitted: ____/____/____

Analyses included in this report:

PCB (TSCA)

PCB (TSCA)



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone: (312) 353-8370 Fax: (312) 886-2591



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Certificate # L2230 Testing

Office of Enforcement and Compliance Assurance
77 W. Jackson
Chicago IL, 60604

Project: United Oil Recovery Services
Project Number: EN0211
Project Manager: Paul Novak

Reported:
Jul-06-11 15:58

ANALYSIS CASE NARRATIVE

Analyst Phone No: 312-353-4331

General Information

This project consisted of one water and three oil samples for PCB analysis by GC003 Rev. 7 (GC/ECD).

The water sample and associated QC samples were prepared by separatory funnel extraction. One additional aliquot of the sample was received and was processed as matrix spike sample. The samples were brown in color, somewhat oily, with suspended particles. Due to lack of sample, a MSD was not prepared. The data user was made aware of this situation.

The oil samples were multi-phasic, with suspended, powdery particles. Prior to obtaining the sample aliquot, the phases were allowed to separate; only the oil part was taken for the analysis. The solvent dilution method (GC012 Rev. 5) was followed in the preparation of these samples.

The extracts were subjected to Florisil cartridge cleanup (GC014 Rev. 3), acid cleanup (GC016 Rev. 2), and sulfur cleanup by copper treatment (GC019 Rev. 2).

All holding times were met.

Sample Analysis and Results

Preparation of Water Samples:

Addition of the extraction solvent (dichloromethane) to the water samples and subsequent shaking resulted in heavy precipitation which made it very difficult to separate the solvent from the aqueous phase. The only alternative was to filter through sodium sulfate. Concentration and solvent exchange to hexane resulted in a very viscous solution and hard gummy material.

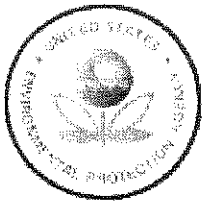
Preparation of Oil samples:

The phases were allowed to separate prior to obtaining the oil sample for analysis. 2.5 g of the oil sample was weighed out and diluted to 25 ml with hexane instead of 1 g diluted to 10 ml as specified in the SOP in order to have sufficient extract for the extensive cleanup anticipated. The amount of surrogates and the spiking solutions for the QC samples were adjusted accordingly.

The extracts were subjected to extensive cleanup following the procedures mentioned earlier in this narrative.

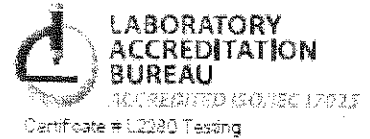
Analysis:

Due to the presence of interferences not eliminated by the various cleanup procedures and the huge, unresolved "humps" eluting late in the chromatograms of both the water and oil extracts, dilutions were made in an attempt to



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bring the baseline down and/or resolve the "hump" to determine if PCBs could be present. The "humps" remained unresolved even though the baseline came down slightly. Therefore, the reporting limits had to be elevated based on the dilutions; reporting limits for the later eluting Aroclors (1254, 1260, 1262, and 1268) are higher than for the earlier eluting Aroclors (1221, 1016, 1232, 1242, and 1248).

There were no PCBs (as Aroclors) detected above the elevated reporting limits. All the results for the samples will be flagged as estimated (J) and biased low (L) due to the outliers mentioned in the QC section below. The outliers could be attributed to the presence of matrix interferences and losses during sample preparation and extensive cleanup.

Please see the LIMS report for the reporting limits.

Quality Control

Instrument Quality Controls:

All instrument controls met QC limits.

Method Quality Control:

1. Water QC samples:

Both TCMX and DCB were outside QC limits in the method blank and in MS1; DCB was outside QC limits in BS1.

Aroclors 1016 and 1260 recoveries in the matrix spike could not be calculated due to matrix interferences that persisted in spite of the extensive cleanup.

2. Oil QC samples:

TCMX recoveries were outside QC limits for BS1 and BSD1.

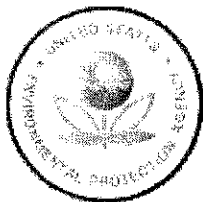
Aroclor 1016 recoveries in BS1 and BSD1 were outside QC limits.

Aroclors 1016 and 1260 recoveries in the MS/MSD could not be calculated due to matrix interferences that persisted in spite of the extensive cleanup.

3. Site samples:

All of the surrogates for the site samples exceeded the QC limits.

J. J. [Signature] 7/6/11



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77 W. Jackson
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Project: United Oil Recovery Services
Project Number: EN0211
Project Manager: Paul Novak

Reported:
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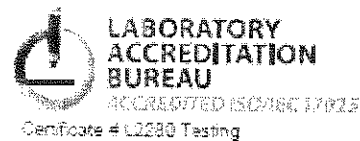
ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S01	1105008-01	Oil	May-24-11 15:55	May-25-11 12:31
S02	1105008-02	Oil	May-24-11 15:58	May-25-11 12:31
S03	1105008-03	Water	May-24-11 16:02	May-25-11 12:31
S04	1105008-04	Oil	May-24-11 16:30	May-25-11 12:31



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Project: United Oil Recovery Services
Project Number: EN0211
Project Manager: Paul Novak

Reported:
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PCB by GC/ECD, EPA 8082 A (modified)
US EPA Region 5 Chicago Regional Laboratory

S01 (1105008-01) Oil Sampled: May-24-11 15:55 Received: May-25-11 12:31

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
PCB-1016	U	J, L	4.86	9.73	ug/g	10	B106013	Jun-14-11	Jun-23-11
PCB-1221	U	J, L	4.86	9.73	"	"	"	"	"
PCB-1232	U	J, L	4.86	9.73	"	"	"	"	"
PCB-1242	U	J, L	4.86	9.73	"	"	"	"	"
PCB-1248	U	J, L	4.86	9.73	"	"	"	"	"
PCB-1254	U	J, L	48.6	97.3	"	100	"	"	Jun-21-11
PCB-1260	U	J, L	48.6	97.3	"	"	"	"	"
PCB-1262	U	J, L	48.6	97.3	"	"	"	"	"
PCB-1268	U	J, L	48.6	97.3	"	"	"	"	"

Surrogate: Tetrachloro-meta-xylene

0.00

%

52-110

"

"

Jun-17-11

Surrogate: Decachlorobiphenyl

0.00

MI

%

52-110

"

"

"

S02 (1105008-02) Oil Sampled: May-24-11 15:58 Received: May-25-11 12:31

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
PCB-1016	U	J, L	4.33	8.65	ug/g	10	B106013	Jun-14-11	Jun-23-11
PCB-1221	U	J, L	4.33	8.65	"	"	"	"	"
PCB-1232	U	J, L	4.33	8.65	"	"	"	"	"

Erlinda Evangelista, Group Leader



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Project Number: EN0211
Project Manager: Paul Novak

Reported:
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PCB by GC/ECD, EPA 8082 A (modified)
US EPA Region 5 Chicago Regional Laboratory

S02 (1105008-02) Oil Sampled: May-24-11 15:58 Received: May-25-11 12:31

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
PCB-1242	U	J, L	4.33	8.65	ug/g	10	B106013	Jun-14-11	Jun-23-11
PCB-1248	U	J, L	4.33	8.65	"	"	"	"	"
PCB-1254	U	J, L	43.3	86.5	"	100	"	"	Jun-21-11
PCB-1260	U	J, L	43.3	86.5	"	"	"	"	"
PCB-1262	U	J, L	43.3	86.5	"	"	"	"	"
PCB-1268	U	J, L	43.3	86.5	"	"	"	"	"

Surrogate: Tetrachloro-meta-xylene	0.225		130 %	52-110	"	"	Jun-17-11
Surrogate: Decachlorobiphenyl	0.00	MI	%	52-110	"	"	"

S03 (1105008-03) Water Sampled: May-24-11 16:02 Received: May-25-11 12:31

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
PCB-1016	U	J, L	0.500	1.00	ug/L	1	B105040	May-31-11	Jun-17-11
PCB-1221	U	J, L	0.500	1.00	"	"	"	"	"
PCB-1232	U	J, L	0.500	1.00	"	"	"	"	"
PCB-1242	U	J, L	0.500	1.00	"	"	"	"	"
PCB-1248	U	J, L	0.500	1.00	"	"	"	"	"
PCB-1254	U	J, L	0.500	1.00	"	"	"	"	"

Erlinda Evangelista, Group Leader

7/6/11



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Project: United Oil Recovery Services
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Reported:
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PCB by GC/ECD, EPA 8082 A (modified)
US EPA Region 5 Chicago Regional Laboratory

S03 (1105008-03) Water Sampled: May-24-11 16:02 Received: May-25-11 12:31

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
PCB-1260	U	J, L	25.0	50.0	ug/L	50	B105040	May-31-11	Jun-23-11
PCB-1262	U	J, L	25.0	50.0	"	"	"	"	"
PCB-1268	U	J, L	25.0	50.0	"	"	"	"	"

Surrogate: Tetrachloro-meta-xylene 2.00E-2 10.0 % 50-150 " " Jun-17-11
Surrogate: Decachlorobiphenyl 0.00 MI % 50-150 " " "

S04 (1105008-04) Oil Sampled: May-24-11 16:30 Received: May-25-11 12:31

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
PCB-1016	U	J, L	4.72	9.43	ug/g	10	B106013	Jun-14-11	Jun-23-11
PCB-1221	U	J, L	4.72	9.43	"	"	"	"	"
PCB-1232	U	J, L	4.72	9.43	"	"	"	"	"
PCB-1242	U	J, L	4.72	9.43	"	"	"	"	"
PCB-1248	U	J, L	4.72	9.43	"	"	"	"	"
PCB-1254	U	J, L	47.2	94.3	"	100	"	"	Jun-21-11
PCB-1260	U	J, L	47.2	94.3	"	"	"	"	"
PCB-1262	U	J, L	47.2	94.3	"	"	"	"	"
PCB-1268	U	J, L	47.2	94.3	"	"	"	"	"

E. Evangelista 7/6/11
Erlinda Evangelista, Group Leader



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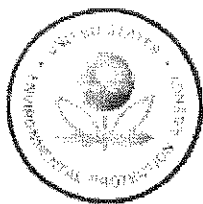
Reported:
Jul-06-11 15:58

PCB by GC/ECD, EPA 8082 A (modified)
US EPA Region 5 Chicago Regional Laboratory

S04 (1105008-04) Oil Sampled: May-24-11 16:30 Received: May-25-11 12:31

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Surrogate: Tetrachloro-meta-xylene	0.113			60.0 %		52-110	B106013	Jun-14-11	Jun-17-11
Surrogate: Decachlorobiphenyl	0.00	MI		%		52-110	"	"	"

Erlinda Evangelista 7/6/11
Erlinda Evangelista, Group Leader



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77 W. Jackson
Chicago IL, 60604

Project: United Oil Recovery Services
Project Number: EN0211
Project Manager: Paul Novak

Reported:
Jul-06-11 15:58

PCB by GC/ECD, EPA 8082 A (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B105040 - EPA 3510B

Blank (B105040-BLK1)

Prepared: May-31-11 Analyzed: Jun-17-11

Analyte	Result	Flags / Qualifiers	Reporting		Spike	Source	%REC	%REC	RPD	RPD
			MDL	Limit				Limits		Limit
PCB-1016	U		0.500	1.00	ug/L					
PCB-1221	U		0.500	1.00	"					
PCB-1232	U		0.500	1.00	"					
PCB-1242	U		0.500	1.00	"					
PCB-1248	U		0.500	1.00	"					
PCB-1254	U		0.500	1.00	"					
PCB-1260	U		0.500	1.00	"					
PCB-1262	U		0.500	1.00	"					
PCB-1268	U		0.500	1.00	"					

Surrogate: Tetrachloro-meta-xylene	8.00E-2	"	2.000E-1	40.0	50-150
Surrogate: Decachlorobiphenyl	9.00E-2	"	2.000E-1	45.0	50-150

LCS (B105040-BS1)

Prepared: May-31-11 Analyzed: Jun-17-11

Analyte	Result	Flags / Qualifiers	Reporting		Spike	Source	%REC	%REC	RPD	RPD
			MDL	Limit				Limits		Limit
PCB-1016	8.10		0.500	1.00	ug/L	10.00	81.0	70-130		
PCB-1260	7.02		0.500	1.00	"	10.00	70.2	70-130		

Surrogate: Tetrachloro-meta-xylene	0.110	"	2.000E-1	55.0	50-150
Surrogate: Decachlorobiphenyl	9.00E-2	"	2.000E-1	45.0	50-150

LCS (B105040-BS2)

Prepared: May-31-11 Analyzed: Jun-17-11



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Phone:(312)353-8370 Fax:(312)886-2591



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Office of Enforcement and Compliance Assurance
77 W. Jackson
Chicago IL, 60604

Project: United Oil Recovery Services
Project Number: EN0211
Project Manager: Paul Novak

Reported:
Jul-06-11 15:58

PCB by GC/ECD, EPA 8082 A (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B105040 - EPA 3510B

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
PCB-1016	7.50		0.500	1.00	ug/L	10.00		75.0	70-130		
PCB-1260	7.84		0.500	1.00	"	10.00		78.4	70-130		
Surrogate: Tetrachloro-meta-xylene	0.100				"	2.000E-1		50.0	50-150		
Surrogate: Decachlorobiphenyl	0.150				"	2.000E-1		75.0	50-150		

LCS Dup (B105040-BSD1)

Prepared: May-31-11 Analyzed: Jun-17-11

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
PCB-1016	8.13		0.500	1.00	ug/L	10.00		81.3	70-130	0.370	30
PCB-1260	8.39		0.500	1.00	"	10.00		83.9	70-130	17.8	30
Surrogate: Tetrachloro-meta-xylene	0.110				"	2.000E-1		55.0	50-150		
Surrogate: Decachlorobiphenyl	0.150				"	2.000E-1		75.0	50-150		

Matrix Spike (B105040-MS1)

Source: 1105008-03

Prepared: May-31-11 Analyzed: Jun-17-11

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
PCB-1016	U	MI	0.500	1.00	ug/L	10.00	U		50-150		
PCB-1260	U	MI	0.500	1.00	"	10.00	U		50-150		
Surrogate: Tetrachloro-meta-xylene	4.00E-2				"	2.000E-1		20.0	50-150		
Surrogate: Decachlorobiphenyl	0.00	MI			"	2.000E-1			50-150		



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PCB by GC/ECD, EPA 8082 A (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B105040 - EPA 3510B

Matrix Spike (B105040-MS1) Source: 1105008-03 Prepared: May-31-11 Analyzed: Jun-17-11

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch B106013 - EPA 3580A

Blank (B106013-BLK1) Prepared: Jun-14-11 Analyzed: Jun-17-11

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
PCB-1016	U		1.25	2.50	ug/g						
PCB-1221	U		1.25	2.50	"						
PCB-1232	U		1.25	2.50	"						
PCB-1242	U		1.25	2.50	"						
PCB-1248	U		1.25	2.50	"						
PCB-1254	U		1.25	2.50	"						
PCB-1260	U		1.25	2.50	"						
PCB-1262	U		1.25	2.50	"						
PCB-1268	U		1.25	2.50	"						

Surrogate: Tetrachloro-meta-xylene 0.400 " 5.000E-1 80.0 52-110
Surrogate: Decachlorobiphenyl 0.400 " 5.000E-1 80.0 52-110

LCS (B106013-BS1) Prepared: Jun-14-11 Analyzed: Jun-17-11

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
PCB-1016	16.3		1.25	2.50	ug/g	25.00		65.3	70-130		



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PCB by GC/ECD, EPA 8082 A (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B106013 - EPA 3580A

LCS (B106013-BS1)											
Prepared: Jun-14-11 Analyzed: Jun-17-11											
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
PCB-1260	20.1		1.25	2.50	ug/g	25.00		80.5	70-130		
Surrogate: Tetrachloro-meta-xylene	0.200				"	5.000E-1		40.0	52-110		
Surrogate: Decachlorobiphenyl	0.450				"	5.000E-1		90.0	52-110		

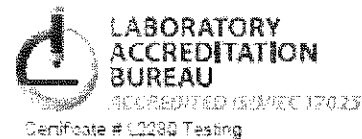
LCS Dup (B106013-BSD1)											
Prepared: Jun-14-11 Analyzed: Jun-17-11											
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
PCB-1016	14.0		1.25	2.50	ug/g	25.00		55.8	70-130	15.7	30
PCB-1260	20.9		1.25	2.50	"	25.00		83.6	70-130	3.78	30
Surrogate: Tetrachloro-meta-xylene	7.50E-2				"	5.000E-1		15.0	52-110		
Surrogate: Decachlorobiphenyl	0.450				"	5.000E-1		90.0	52-110		

Matrix Spike (B106013-MS1)											
Source: 1105008-04 Prepared: Jun-14-11 Analyzed: Jun-17-11											
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
PCB-1016	U	MI	0.460	0.919	ug/g	9.191	U		50-150		
PCB-1260	U	MI	0.460	0.919	"	9.191	U		50-150		
Surrogate: Tetrachloro-meta-xylene	0.00				"	1.838E-1			52-110		
Surrogate: Decachlorobiphenyl	0.00	MI			"	1.838E-1			52-110		



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PCB by GC/ECD, EPA 8082 A (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B106013 - EPA 3580A

Matrix Spike (B106013-MS1) Source: 1105008-04 Prepared: Jun-14-11 Analyzed: Jun-17-11

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Matrix Spike Dup (B106013-MSD1) Source: 1105008-04 Prepared: Jun-14-11 Analyzed: Jun-17-11

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
PCB-1016	U	MI	0.475	0.951	ug/g	9.506	U		50-150		30
PCB-1260	U	MI	0.475	0.951	"	9.506	U		50-150		30

Surrogate: Tetrachloro-meta-xylene	0.00				"	1.901E-1			52-110		
Surrogate: Decachlorobiphenyl	0.00				"	1.901E-1			52-110		



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591



**LABORATORY
ACCREDITATION
BUREAU**
ACCREDITED ISO/IEC 17025
Certificate # L2280 Testing

Office of Enforcement and Compliance Assurance
77 W. Jackson
Chicago IL, 60604

Project: United Oil Recovery Services
Project Number: EN0211
Project Manager: Paul Novak

Reported:
Jul-06-11 15:58

Notes and Definitions

- MI Matrix Interferences
- L The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- U Not Detected
- NR Not Reported

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Default Report (not modified)
			VERSION 6.08:2012
	PCB (TSCA)	(Oil)	J-Flags used
	PCB (TSCA)	(Oil)	Result calculations based on MDL
	PCB (TSCA)	(Oil)	Special Units: (ug/g)
	PCB (TSCA)	(Water)	J-Flags used
	PCB (TSCA)	(Water)	Result calculations based on MDL
	PCB (TSCA)	(Water)	Special Units: (ug/L)
1105008-01	PCB (TSCA)	Decachlorobiphenyl	MI: Matrix Interferences
1105008-01	PCB (TSCA)	PCB-1016	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-01	PCB (TSCA)	PCB-1221	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-01	PCB (TSCA)	PCB-1232	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-01	PCB (TSCA)	PCB-1242	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-01	PCB (TSCA)	PCB-1248	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-01	PCB (TSCA)	PCB-1254	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-01	PCB (TSCA)	PCB-1260	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-01	PCB (TSCA)	PCB-1262	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-01	PCB (TSCA)	PCB-1268	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-02	PCB (TSCA)	Decachlorobiphenyl	MI: Matrix Interferences
1105008-02	PCB (TSCA)	PCB-1016	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-02	PCB (TSCA)	PCB-1221	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-02	PCB (TSCA)	PCB-1232	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-02	PCB (TSCA)	PCB-1242	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-02	PCB (TSCA)	PCB-1248	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-02	PCB (TSCA)	PCB-1254	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-02	PCB (TSCA)	PCB-1260	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
1105008-02	PCB (TSCA)	PCB-1262	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-02	PCB (TSCA)	PCB-1268	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-02	PCB (TSCA)	Tetrachloro-meta-xylene	Exceeds upper control limit
1105008-03	PCB (TSCA)	Decachlorobiphenyl	MI: Matrix Interferences
1105008-03	PCB (TSCA)	PCB-1016	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-03	PCB (TSCA)	PCB-1221	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-03	PCB (TSCA)	PCB-1232	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-03	PCB (TSCA)	PCB-1242	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-03	PCB (TSCA)	PCB-1248	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-03	PCB (TSCA)	PCB-1254	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-03	PCB (TSCA)	PCB-1260	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-03	PCB (TSCA)	PCB-1262	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-03	PCB (TSCA)	PCB-1268	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-03	PCB (TSCA)	Tetrachloro-meta-xylene	Exceeds lower control limit
1105008-04	PCB (TSCA)	Decachlorobiphenyl	MI: Matrix Interferences
1105008-04	PCB (TSCA)	PCB-1016	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-04	PCB (TSCA)	PCB-1221	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-04	PCB (TSCA)	PCB-1232	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-04	PCB (TSCA)	PCB-1242	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-04	PCB (TSCA)	PCB-1248	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-04	PCB (TSCA)	PCB-1254	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-04	PCB (TSCA)	PCB-1260	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
1105008-04	PCB (TSCA)	PCB-1262	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.

Items for Project Manager Review

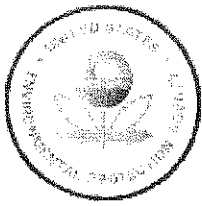
LabNumber	Analysis	Analyte	Exception
I105008-04	PCB (TSCA)	PCB-1268	L: The identification of the analyte is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.
B105040-BLK1	PCB (TSCA)	Decachlorobiphenyl	Exceeds lower control limit
B105040-BLK1	PCB (TSCA)	Tetrachloro-meta-xylene	Exceeds lower control limit
B105040-BS1	PCB (TSCA)	Decachlorobiphenyl	Exceeds lower control limit
B105040-MS1	PCB (TSCA)	Decachlorobiphenyl	MI: Matrix Interferences
B105040-MS1	PCB (TSCA)	PCB-1016	MI: Matrix Interferences
B105040-MS1	PCB (TSCA)	PCB-1016	Spike recovery below MDL
B105040-MS1	PCB (TSCA)	PCB-1260	MI: Matrix Interferences
B105040-MS1	PCB (TSCA)	PCB-1260	Spike recovery below MDL
B105040-MS1	PCB (TSCA)	Tetrachloro-meta-xylene	Exceeds lower control limit
B106013-BS1	PCB (TSCA)	PCB-1016	Exceeds lower control limit
B106013-BS1	PCB (TSCA)	Tetrachloro-meta-xylene	Exceeds lower control limit
B106013-BSD1	PCB (TSCA)	PCB-1016	Exceeds lower control limit
B106013-BSD1	PCB (TSCA)	Tetrachloro-meta-xylene	Exceeds lower control limit
B106013-MS1	PCB (TSCA)	Decachlorobiphenyl	MI: Matrix Interferences
B106013-MS1	PCB (TSCA)	PCB-1016	MI: Matrix Interferences
B106013-MS1	PCB (TSCA)	PCB-1016	Spike recovery below MDL
B106013-MS1	PCB (TSCA)	PCB-1260	MI: Matrix Interferences
B106013-MS1	PCB (TSCA)	PCB-1260	Spike recovery below MDL
B106013-MSD1	PCB (TSCA)	PCB-1016	MI: Matrix Interferences
B106013-MSD1	PCB (TSCA)	PCB-1016	Spike recovery below MDL
B106013-MSD1	PCB (TSCA)	PCB-1260	MI: Matrix Interferences
B106013-MSD1	PCB (TSCA)	PCB-1260	Spike recovery below MDL

Sample, Log and Extraction Comments

105008-03
PCB (TSCA)

pH = 6

pH = 6



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

WORK ORDER

Printed: 7/6/2011 4:14:40PM

1105008

US EPA Region 5 Chicago Regional Laboratory

Client: Office of Enforcement and Compliance Assurance
Project: United Oil Recovery Services

Project Manager: Greg Mitsakopoulos
Project Number: EN0211

Report To:

Paul Novak
e of Enforcement and Compliance Assu

77 W. Jackson
Chicago, IL 60604

Phone: 440-250-1714
Fax: (312) 886-2591

Date Due: Jul-11-11 15:00 (45 day TAT)

Received By: Chi Tang

Date Received: May-25-11 12:31

Logged In By: Robert Snyder

Date Logged In: May-25-11 15:20

Samples Received at: 5.6°C
Sample tags/labels Yes
Seals Intact Yes
Received on ice Yes
Paperwork Included Yes

Analysis	Due	TAT	Expires	Comments
1105008-01 S01 [Oil] Sampled May-24-11 15:55 Central				
PCB (TSCA)	Jul-11-11 12:00	45	Nov-20-11 15:55	
1105008-02 S02 [Oil] Sampled May-24-11 15:58 Central				
PCB (TSCA)	Jul-11-11 12:00	45	Nov-20-11 15:58	
1105008-03 S03 [Water] Sampled May-24-11 16:02 Central				
PCB (TSCA)	Jul-11-11 12:00	45	May-31-11 16:02	pH = 6
1105008-04 S04 [Oil] Sampled May-24-11 16:30 Central				
PCB (TSCA)	Jul-11-11 12:00	45	Nov-20-11 16:30	

